

REMARKS/ARGUMENTS

Thorough examination and careful review of the application by the Examiner is noted and appreciated. The telephone conference with Examiner on July 21, 2003 was helpful and appreciated.

A proper drawing sheet including Fig. 1 is attached for entry as an approved corrected drawing sheet for FIG. 1. No new matter has been added to Fig. 1.

Please elect claims 1-7, and 13-18. Claims 1-7, and 13-18 remain in this application. Claims 8-12 have been cancelled as the result of an earlier restriction requirement.

The examiner has rejected claims 1-7, and 13-16.

By way of the foregoing amendments, claim 17 is newly added and claims 1, and 13 have been amended. Accordingly, upon entry of this Response, Claims 1-7, and 13-18 are pending.

The changes in the drawings, specification, and claims do not introduce new matter but clarify matters shown and described in the application as filed. The foregoing amendments and following remarks are believed to be fully responsive to the Office Action mailed May 13, 2003 and render all currently pending claims at issue patentably distinct over the references cited by the Examiner. The foregoing amendments are taken in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicant would otherwise be entitled in view of the prior art. Reconsideration and examination of this application is respectfully requested in light of the foregoing amendments and the following remarks.

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EXAMINER'S OFFICE ACTION

In the May 13, 2003 Office Action referenced above, the Examiner:

rejected claims 8-12 as being drawn to a nonelected invention;

approved the proposed substitute sheets of drawings filed on April 22, 2003 (part of Paper No. 6);

rejected Claims 1-7, and 13-16 under 35 U.S.C. §112, 1st Paragraph, as failing to clearly define subject matter which was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention;

rejected Claims 1-7, and 13-16 under 35 U.S.C. §112, 2nd Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention;

rejected Claims 1-5 and 13-16 under 35 USC § 103(a) as being anticipated by JOHNSON U.S. Patent No. 6,023,683 (hereinafter "JOHNSON") in view of Jolliffe et. al U.S. Patent No. 5,646,862 (hereinafter "JOLLIFFE"); and

rejected Claims 6-7 under 35 U.S.C. §103(a) as being obvious over JOHNSON/ JOLLIFFE combination in further view of Danneels et. al. U.S. Patent No. 6,272,472 B1 (hereinafter "DANNEELS").

Restriction Requirement

On page 2, clause 2 of the May 13, 2003 office action Examiner requested cancellation of Claims 8-12 as they are drawn to a nonelected invention. Applicant elects claims 1-7 and 13-17. Claims 8-12 have been cancelled as the result of an earlier restriction requirement.

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In view of the examiner's earlier restriction requirement, applicant retains the right to present claims 8-12 in a divisional application.

Approval of the Drawings

Examiner has approved the proposed substitute sheet of drawings filed on April 22, 2003 (part of Paper No. 6). On page 2, clause 3 of the May 13, 2003 office action, Examiner has required that a proper drawing correction or corrected drawings be submitted in this reply to the May 13, 2003 office action to avoid abandonment of the application. Accordingly, attached hereto is a proper corrected drawing sheet for FIG. 1 as required by Examiner. No new matter has been added to FIG. 1.

Claim Rejections Under 35 U.S.C. §112 1st Paragraph

Claims 1-7 and 13-16 are rejected under 35 U.S.C. §112 1st Paragraph as failing to clearly define subject matter which was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Accordingly, Claims 1 and 13 have been amended as required under 35 USC § 112 1st paragraph to obviate Examiner's rejection of Claims 1-7 and 1-13 under 35 USC § 112 1st Paragraph. Applicant traverses the Examiner's rejections under 35 U.S.C. §112 1st Paragraph based on the amended claims 1 and 13.

In page 3, clause 5 of the May 13, 2003 Office Action, the rejection of claims 1-7 under 35 UCS 112 1st paragraph was based on the uncertainty of "how "purchasing said product from said at least one identified supplier" occurs since this would make irrelevant the earlier claimed distinction of searching for components from particular suppliers."

Claim 1 has been amended to clearly define the step of "creating an information template for each of the plurality of

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suppliers" and to clearly define the information template which "specifies a product **having at least one component** disposed within the product".

As applicant is entitled to be "his or her own lexicographer", see Multiform Desiccants Inc. v. Medzam Ltd., 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998), the term "product" as used within applicant's originally submitted application "means any tangible item which must be created or obtained and which meets certain needs or requirements of a business organization and/or certain customers of such a business organization." Present invention, page 1, lines 23-27. See also, present application, page 3, lines 15-22 "a method for designing and purchasing a product . . . which identifies potential sources of the product and/or of components which may be assembled to produce such a product while technically and economically evaluating each of the potentially sourced products and component combinations."

Thus, a product having only one component allows a single component to be a product. Additionally, if each product has at least one component, then a search of each of the information templates for each supplier would necessarily search the product and the at least one component disposed within the product. Likewise, a search of each of the information templates would necessarily search a product and each component within a product if the product had more than one component (see newly added claim 18, that defines a product as having a plurality of components).

Additionally, in the May 13, 2003 Office Action, on page 7, clause 6a, claim 13 was rejected based on the consideration that the phrase "creating an information template having a dynamically configurable and searchable field . . ." contains new matter. Applicant traverses this new matter rejection.

Claim 13 has been amended to clearly define the step of "creating an information template having a dynamically configurable and searchable field wherein the dynamically configurable and searchable field is configured to define a plurality of interrelationship attributes related to the interrelationship of the several interconnected components of said product associated with each of said plurality of suppliers and wherein the interrelationship attributes of said components further define the overall function of each of the several interconnected components".

There is support for the amended claim 13 as identified in the original specification, page 9, lines 7, "[T]emplate 50 includes a first dynamically configurable and searchable field 52 which identifies an item (i.e. a final assembly or component). Template 50 further includes a dynamically configurable and searchable field 56 which specifies the attributes related to the interrelationship of this item to other items or components."

In light of amendments to Claims 1 and 13, Examiner's rejections under 35 U.S.C. 112^{1st} paragraph have been obviated.

Claim Rejections Under 35 U.S.C. §112 2nd Paragraph

Claims 1-7 and 13-16 are rejected under 35 U.S.C. §112, 2nd Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, Claims 1 and 13 have been amended as required under 35 USC § 112 2nd paragraph to obviate Examiner's rejection of Claims 1-7 and 1-13 under 35 USC § 112 2nd Paragraph. Applicant traverses the Examiner's rejections under 35 U.S.C. §112 2nd Paragraph based on the amended claims 1 and 13.

In the May 13, 2003 Office Action, page 4, clause 8a, claim 1 was rejected based on the uncertainty of whether "the

computerized design file" is associated with the product or associated with a component.

Claim 1 was amended to further define the computerized design file. Claim 1 as amended clearly defines the steps of

"searching each of the information templates for the specified at least one component disposed within each product;

causing a design file of said product to be created by performing the steps of

transmitting at least one computerized design file associated with **the at least one component disposed within said product** created from each of said identified suppliers from the plurality of suppliers to a purchaser, and

selectively using said at least one transmitted computerized design file **associated with the at least one component disposed within said product** to create a three dimensional prototype of said product;

and

purchasing **said at least one component disposed within the product** from said at least one identified supplier from the plurality of suppliers."

As defined in the currently amended claim 1, the product has at least one component disposed within the product, and therefore, the computerized design file is associated with the component. Thus, the at least one component design file is used to create the 3-D prototype.

In the May 13, 2003 Office Action, page 4, clause 8b, claim 1 was rejected based on the uncertainty of whether the step of purchasing said product from said at least one identified supplier" provides for each supplier to only supply a component. The examiner suggested that the last phrase be changed to "purchasing said component and not the product." Claim 1 has been amended in light of Examiner's suggestion.

In the May 13, 2003 Office Action, page 5, clause 8c, claim 1 was rejected based on the uncertainty of whether the "searching" and "transmitting step was performed for just a single component or all components. Claim 1, as amended, associates the searching and transmitting step with the at least one component disposed within said product.

As mentioned supra, the at least one component is disposed within the product and when the product has only one component, the product is the component. If the product has a plurality of components, then each of the component design files would be searched and transmitted.

In the May 13, 2003 Office Action, page 5, clause 8d, claim 1 was rejected based on the uncertainty of whether the step of "causing a design filed of said product to be created . . ." includes all three sub-steps of "transmitting," "using," and "purchasing".

Additionally, claim 1 as amended clearly defines the step of "causing a design filed of said product to be created has two sub-steps of "transmitting and using". Thus, the step of "purchasing said at least one component . . ." is an ordinary step, and not a substep.

In the May 13, 2003 Office Action, page 6, clause 8e, claim 13 was rejected based on the uncertainty of how the information template which corresponds to the particular suppliers is dynamically configurable. Currently amended claim 13 clearly defines the information template to have "a dynamically configurable and searchable field wherein the dynamically configurable and searchable field is configured to specify a plurality of interrelationship attributes related to the interrelationship of the several interconnected components of said product associated with each of said plurality of suppliers and wherein the interrelationship attributes of said components further define the overall function of each of the several interconnected components"

Claim Rejections Under 35 USC § 103

Claims 1-5 and 13-16 are rejected under 35 USC § 103(a) as being anticipated by JOHNSON '683 in view of JOLLIFFE; and

Claims 6-7 were rejected under 35 U.S.C. §103(a) as being obvious over JOHNSON/ JOLLIFFE combination in further view of Danneels et. al. U.S. Patent No. 6,272,472 B1 (hereinafter "DANNEELS").

The rejection of claims 1-5 and 13-16 under 35 USC § 103(a) based on JOHNSON, JOLLIFFE, and DANNEELS is respectfully traversed.

The JOHNSON reference is directed to a method of purchasing products from a supplier catalog, creating a catalog database of products listed within a plurality of supplier catalogs, wherein each product is displayed within an associated supplier catalog, and requisitioning an available product **based on a best price** from a selected supplier catalog. See Johnson col. 4, lines 35-41, "a catalog database 36 comprised preferably of at least two vendor product catalogs. The catalogs, and hence catalog database 36, preferably include such information as part number, price, catalog number, vendor name or I.D., and vendor catalog number, **as well as textual information** and **images** of or relating to the catalog products." See also Johnson col. 5, lines 66-67 through col. 6, lines 1-3, "The data passed by interface 60 preferably comprise all or a subset of the following twelve fields: vendor name, vendor number, vendor part (catalog) number, product description, bid price, list price, keyword, page number, quantity, unit, catalog text, and catalog images.")

JOHNSON uses an interface to pass 12 fields from a supplier to the catalog database and then searches the 12 fields for products that match pre-defined catalog search criteria to form a purchase requisition. See JOHNSON col. 6,

lines 5-22. The 12 fields comprise: "vendor name, vendor number, vendor part (catalog) number, product description, bid price, list price, keyword, page number, quantity, unit, catalog text, and catalog images." See JOHNSON col. 5, lines 65-67 through col. 6 lines 1-3.

The JOLLIFFE reference generally teaches the concept of designing vendor-neutral engineering systems, particularly involving electrical engineering systems that are part of an automobile. The JOLLIFFE reference further teaches a generic translation software that operates between two different Computer Aided Engineering(CAE) tools. See JOLLIFFE, col. 5, lines 27-31 ("In its simplest form, the system disclosed is thus a method for data exchange and communication between vendor independent tools and tools that do not necessarily speak the same language or have the same concepts.") Additionally JOLLIFFE uses a 2-dimensional CAD file for use in designing an optimal electrical system. See generally JOLLIFFE and FIGS. 1-14. JOLLIFFE also teaches a limited use of a CAE tool that is used to design a 3-D harness. See JOLLIFFE, col. 5, lines 5-7 ("There might also be additional tools (not shown) which perform full 3-D harness design").

The Daniels reference teaches a dynamic linking system that facilitates communications between three system components: a supplier server, a reseller server, and a purchaser client web browser. See DANNEELS col. 4, lines 22-23. DANNEELS enables a purchaser to select a reseller from a list of resellers supplied by the supplier server to purchase a desired item from a reseller that sells the associated desired item.

Unlike the present invention, the JOHNSON and JOLLIFFE reference fails to teach, suggest or hint at the use of the very specific vendor neutral electrical system to "**selectively us[e] said at least one transmitted computerized design file**

associated with the at least one component disposed within said product to create a three dimensional prototype of said product." Pending Application, Claim 1.

As mentioned previously by Examiner in the May 13, 2003 office action, on page 7, and in Applicant's April 22, 2003 reply (Paper No. 6), the JOHNSON reference fails to disclose use of a three dimensional image to produce a prototype of the product as defined in claim 1.

It is well known in the automotive electrical arts that a 3-D harness design may be used to determine the relative loads, transients, and distances of the wires disposed within a wiring harness. Such a 3-D harness design as described in JOLLIFFE may be created using the method of the present invention. However, the same 3-D harness design tool could not create a three dimensional prototype of any product¹ as defined in the present invention using the JOLLIFFE method. "In keeping with the present invention, there is further provided a method for accommodating data interchange between multiple vendor-independent Computer Aided Engineering (CAE) tools. **The method is specifically directed for use in an integrated vehicle electrical design and analysis system.**" JOLLIFFE, col. 10, lines 21-26. Thus, the JOLLIFFE reference teaches away from using a general design method for designing an non-electrically related product as disclosed in the present invention.

¹ See supra ("product" as used within applicant's originally submitted application "means any tangible item which must be created or obtained and which meets certain needs or requirements of a business organization and/or certain customers of such a business organization." Present invention, page 1, lines 23-27. See also, present application, page 3, lines 15-22 "a method for designing and purchasing a product . . . which identifies potential sources of the product and/or of components which may be assembled to produce such a product while technically and economically evaluating each of the potentially sourced products and component combinations.").

Additionally, such a 3-D wiring harness alone or in combination with other wiring harnesses cannot create a 3-dimensional prototype of a fully surfaced and textured automotive component or product. Therefore, a 3-D CAD file of a wiring harness cannot be combined with the template of the JOHNSON reference to render a 3-D "product" prototype as is disclosed in the present invention.

Therefore, there is no motivation to combine the JOHNSON reference with the JOLLIFFE reference to render applicant's invention.

Additionally, even if a motivation to combine the JOHNSON reference with the JOLLIFFE reference exists, the results of the combination of the two references of record would still not render the 3-dimensional product prototype design produced using the present invention. For example, if the pre-defined fields of the catalog template taught in the JOHNSON reference, particularly the textual information and 2-dimensional catalog images, were able to be translated into a vendor-neutral language using the method of the JOLLIFFE reference, only 2-dimensional images or data relating to electrical systems could be used in accordance with the JOLLIFFE method and furthermore, the images could not be converted into a 3-D product prototype using the JOLLIFFE method. Conversely, using the method of the JOHNSON reference, data relating to a 3-D wiring harness of the JOLLIFFE invention would still be transmitted as 2-dimensional image using the catalog image template field of the JOHNSON invention. Therefore, it would not be obvious to combine the teachings of the JOHNSON reference with the teachings of the JOLLIFFE reference to render the 3-D prototype design of the present invention.

Thus, Claim 1 is now believed to be patentably distinct from the prior art of record. Additionally, claims 1-7, and 17-18 which depend from claim 1 are also believed to be

patentably distinct from the prior art of record and thus, present patentable subject matter.

With regard to claims 6-7, claims 6-7 were rejected under 35 U.S.C. §103(a) as being obvious over JOHNSON/JOLLIFFE combination in further view of DANNEELS.

The DANNEELS reference fails to disclose, teach, or suggest a purchasing system that **"selectively us[es] . . . at least one transmitted computerized design file associated with the at least one component disposed within said product to create a three dimensional prototype of said product"** as disclosed in independent Claim 1, from which claims 6-7 depend. Additionally, as discussed supra there is no motivation to combine, nor would it have been obvious to combine the JOHNSON reference with the JOLLIFFE reference to render the present invention. Thus, there also exists no motivation to combine the JOHNSON reference and the JOLLIFFE reference with the DANNEELS reference to render further combining the present invention.

With regard to claim 17, claim 17 has been newly added to further define the product as being used in an automobile. Support for adding claim 17 can be found on Pending Application, page 1, lines 19-27.

With regard to claim 18, claim 18 has been newly added to further define the product as having a plurality of interconnected elements [i.e. components]. Support for adding claim 18 can be found on Pending Application, page 6, lines 21-26 ("the basic tangible elements [i.e. components] which cooperatively form the product are identified").

Claim 13 has been amended to clearly define the information template associated with each supplier and with each product.

Applicant, being his own lexicographer, see MPEP 2111.01, hereby defines "interrelationship" to mean how each of the

products or components disposed within the products spatially relate to one another, or similarly, how the item [i.e. product or component] relates to other items [i.e. products components]. See Present Application, page 7, lines 10-14: "Step 18 follows step 16, and in this step, . . . any **interrelationship attributes (i.e., attributes related to the interrelationship of the product to other products or components)** are identified." See also, Pending Application, page 6, lines 18-23 describing the interrelationship of two components used to form a product: "For instance, the needed gear assembly may require a pair of dissimilar gears which are coupled in a certain manner [i.e. "interrelationship between the pair of dissimilar gears'] in order to provide the desired coupling function. Therefore, in this step 16, **the basic tangible elements [i.e. "components"] which cooperatively form the product are identified.**"

Patents are written by and for skilled artisans, see Vivid Technologies v. American Signs, 200 F.3d 795, 804, 53 USPQ2nd 1295, see also S3 v. Nvidia, 259 F.3d 1354, 1371, 59 USPQ 2nd 1795, 1749-50. Thus, the definition and use of "interrelationship" with regard to automotive products or components is well known in the art. Use of the term "interrelationship" can be found in U.S. Patent application No. 5, 380,978 entitled "Method and apparatus for assembly of car bodies and other 3-dimensional objects, filed on July 12, 1991 issued to PRYOR discussing the "interrelationship" of components being assembled in an automotive manufacturing environment "This is quite different than today's practice, where sub-assemblies are built up, even in other factories, hundreds of miles away, and one really has no knowledge of the **interrelationship** of the dimensions of the various pieces. One only "hopes" that it goes together." Col. 13, lines 33-37.

Thus, "interrelationship" can be interpreted as the physical location of structural relationship of one component or product to another. Therefore, claims 13-16 must be examined in light of the definitions provided by the applicant lexicographer in the specification as discussed supra.

Using applicant's definition of the term "interrelationship", no such template having a dynamically searchable field for defining **interrelationship attributes** is provided in either the JOHNSON or the JOLLIFFE reference.

Both the JOHNSON and the JOLLIFFE reference fail to disclose "a dynamically configurable and searchable field wherein the dynamically configurable and searchable field is configured to specify a plurality of interrelationship attributes related to the interrelationship of the several interconnected components of said product associated with each of said plurality of suppliers and wherein the interrelationship attributes of said components further define the overall function of each of the several interconnected components" as recited in amended claim 13. While the fields of the template taught in JOHNSON may have pre-defined but searchable fields, none of the pre-defined values within the fields define an interrelationship of the several interconnected components of the product identified.

With regard to the JOHNSON reference, the hit list consists of a list of product part descriptions and numbers and the textual information field as taught in the JOHNSON reference lists factual information and some physical specifications of the product or component as a whole, but fails to describe the interrelationship of the product with regard to another product, or of a component with regard to another component. See JOHNSON appendices. Additionally, no such template or fields are taught in the JOLLIFFE reference.

Thus, there is no motivation to combine the JOHNSON reference with the JOLLIFFE reference to render applicant's invention.

It is believed that claim 13 as amended is patentably distinct from the prior art of record. Additionally, the claims 14-16 which depend from claim 13 are also believed to be patentably distinct from the prior art of record.

Accordingly, Applicants respectfully submit that Claims 1 and 13 are allowable and that the rejection under 35 U.S.C. § 103(a) based on JOHNSON, JOLLIFFE, and DANNEELS be withdrawn.

Claims 2-7, and 17-18 depend from Claim 1 and are therefore allowable for the same reason that Claim 1 is allowable. Claims 14-16 depend on Claim 13 and are likewise allowable.

The foregoing amendments further clarified some of the features of the method for designing and purchasing a product. It is believed that the present invention as amended is novel and non-obvious over the references relied upon by the Examiner.

Independent Claim 1 has been amended to further define the invention. Therefore, Claim 1 is now believed to patentably define over the prior art relied upon by the Examiner. Additionally, Claims 5-7, and 17-18 which depend from Claim 1 are also believed to be patentable over the prior art relied upon by the Examiner for the same reasons that Claim 1 from which they depend is also patentable.

Independent Claim 13 has been amended to further define the invention. Therefore, Claim 13 is now believed to patentably define over the prior art relied upon by the Examiner. Additionally, Claims 14-16 which depends from Claim 13 are also believed to be patentable over the prior art relied upon by the Examiner for the same reasons that Claim 13 is also patentable.

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The rejection of claims 5-7, and 13-15 under 35 USC § 103(a) based on obviousness is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

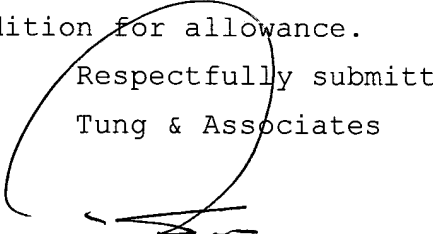
Based on the foregoing, the Applicant respectfully submits that all of the pending claims, i.e. claims 1-7, and 13-18 are now in condition for allowance. Such favorable action by the Examiner at an early date is respectfully solicited.

Attached hereto is a Replacement Drawing sheet.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 706-1510 for any fee which may be due.

In the event that the present invention is not in a condition for allowance for any other reasons, the Examiner is respectfully invited to call the Applicant's representative at his Bloomfield Hills, Michigan office at (248) 540-4040 such that necessary action may be taken to place the application in a condition for allowance.

Respectfully submitted,
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